

REMARKS

The Examiner is thanked for the careful examination of the application. However, in view of the following remarks, the Examiner is respectfully requested to reconsider and withdraw the rejections.

The present application is directed to an image processing apparatus and method. The method employs a hierarchical encoding which results in a bit stream of coded data of LL, 3HL, 3LH, 3HH, 2HL, 2LH, 2HH, 1HL, 1LH and 1HH for each encoded image. As explained in paragraphs [0044] and [0045] of the published application, the coded data of LL is all that is needed to be acquired in order to produce a 75 dpi version of the image, the coded data of LL, 3HL, 3LH and 3HH are needed for a 150 dpi version of the image, and so on. Of course, the coded data must be decoded before the image can be displayed. For example, the coded data of LL for an image must be acquired and then decoded before a 75 dpi version of that image can be displayed.

As further discussed in paragraphs [0063] and [0064] of the published application, when it is desired to first display only low resolution versions of a plurality of images, the apparatus acquires first only the low level data of each of the plurality of images, so that the low level data can be decoded and the low resolution versions of the images can be displayed while the rest of the coded data for the images is still being acquired. Then, during decoding of the data at the low level of hierarchical encoding for each of the plurality of images, the unit acquires data at higher levels of hierarchical encoding for each of the plurality of images.

Claim 1 is rejected as being anticipated by U.S. Patent No. 5,267,052, hereinafter Bannai. In response, the subject matter of Claim 6, along with additional subject matter, is incorporated into Claim 1.

Amended Claim 1 recites an image processing apparatus which acquires coded data of a plurality of images from an external recording medium. The coded data is hierarchically encoded data of the plurality of images. The apparatus includes an input interface which receives signals from the external recording medium, an image input controller which acquires the coded data by the input interface first only at a first level of hierarchical encoding from the external recording medium over the plurality of images, a decoder which decodes the coded data acquired by the image input controller, and a storage device which stores data decoded by the decoder. The image input controller receives data at a second level of hierarchical encoding for each of the plurality of images, after data acquisition of the data at the first level of hierarchical encoding is completed, and during decoding of the data at the first level of hierarchical encoding. The first level includes less resolution than the second level.

Bannai discloses an image processing apparatus. The apparatus includes a communication control unit 5 which controls transmission and reception of image files, a memory 11, an encoding device 17 for encoding image data, and a decoding device 9 for decoding data.

In the Office Action, the Examiner states that Bannai discloses an image input controller which acquires coded data by a input interface first only at a low level of hierarchical encoding from an external recording medium over a plurality of images.

Furthermore, in an effort to provide support for his reasoning, the Examiner asserts in the last paragraph on page 12 that

Bannai explains the transmission process in which the "icon" (lowest resolution images) are first transmitted and can be quickly displayed because of the small amount of data to avoid acquiring undesired images and unnecessary data from unwanted original images (Col. 17 line 67 through Col. 18 line 11).

That portion of Bannai is a discussion of transmission of image data between computer terminals. According to that discussion, after transmission of icon images from the terminal 420-2 to the terminal 420-3, the icon images are displayed. (Clearly, at the point that the icon images are displayed, the data corresponding to the displayed icon images has already been decoded). That discussion goes on to state that "if the received image is not a desired one, the terminal 420-3 may stop the transmission from the terminal 420-2 before receiving the original image" (column 18, lines 6-9). Thus, the user is able to prevent reception of an original image after a corresponding icon image has been decoded and displayed. Clearly, then, there is no receiving of the data corresponding to the original image during decoding of the data corresponding to the icon image. Otherwise, the user would be unable to prevent reception of the original image after the icon image has been decoded and displayed, as that original image would have already been received during the decoding of the icon image.

Accordingly, Bannai fails to disclose an image processing apparatus having an image input controller which acquires coded data by an input interface first only at a first level of hierarchical encoding from an external recording medium over a plurality of images, and which receives data at a second level of hierarchical encoding for each of the plurality of images, after data acquisition of the data at the first level of hierarchical encoding is completed, and during decoding of the data at

the first level of hierarchical encoding, where the first level includes less resolution than the second level, in combination with the other features recited in amended Claim 1.

Claim 1 is therefore allowable over Bannai, and withdrawal of the rejection of Claim 1 is respectfully requested.

Independent Claims 9 and 15 are also allowable for reasons consistent with the above discussion of Claim 1.

The dependent claims are allowable at least by virtue of their dependence from allowable independent claims. Thus, a detailed discussion of the additional distinguishing features recited in the dependent claims is not set forth at this time.

Early and favorable action with respect to this application is respectfully requested.

In the event that there are any questions concerning this response, or the application in general, the Examiner is respectfully requested to contact the undersigned in order to expedite prosecution.

Respectfully submitted,

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